

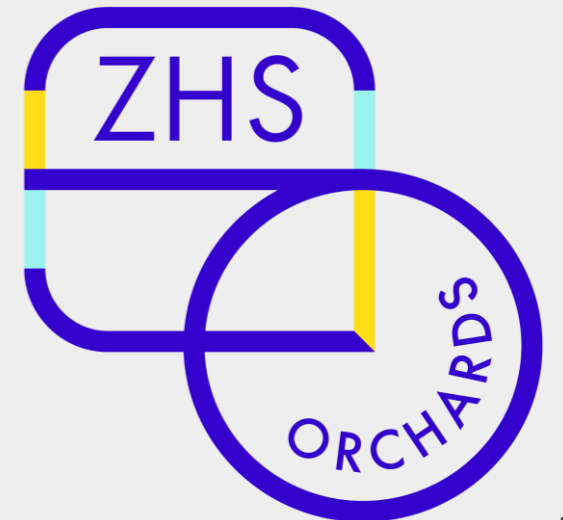


Digital Analytics Lunchtime Webinars

3rd Sept – Resolving Transaction Discrepancies

G'day I'm Peter

- Australian
- Lived in London for 16 years
- Now making a home in the Netherlands
- Worked in Digital Analytics since 2006
- Launched own agency in 2010, merged in 2016, sold in 2018, exited last year
- Founder of MeasureCamp
- Back freelancing as a Data Strategy Director



Lunchtime Webinars

- Different approach to sharing my ideas
 - Not everyone reads blog posts
 - My ideas don't translate well to a formal course
- 45 min lunchtime sessions
 - Allow people to follow along in their lunchbreak
 - Keeping to the MeasureCamp style with plenty of opportunity for discussion
- Purpose of workshops
 - To share my knowledge with others
 - Best way to challenge/develop ideas, make them public
 - Lead generation

Concept

The Purpose of Digital Analytics

*To provide intelligence that informs
business actions leading to an
improvement in performance for online
organisations*

Digital Analytics data is never accurate...

1

The analytics code is not fired

2

There are errors in the implementation

3

Different technologies use different definitions

4

Actions outside the website are not captured

Digital Analytics data is never accurate...

1

The anal

2

There ar

3

Differen

4

Actions outside the website are not captured

Intelligence > Data

Useful > Accurate

Some
metrics
are known



Example: Google Analytics Transactions



- All the logic described can be used with any Digital Analytics tool – Google Analytics will be used for examples
- Will focus on transactions but logic equally applies to leads, job applications or any other metric where the actual data is known

Stakeholders
need to
trust their data



<5%

Investigation

Requirements for Investigation

Backend data

The actual data must be available through backend systems

Unique ID

Each instance needs a unique ID associated with it, whether a transaction ID, lead ID or customer ID

Additional details

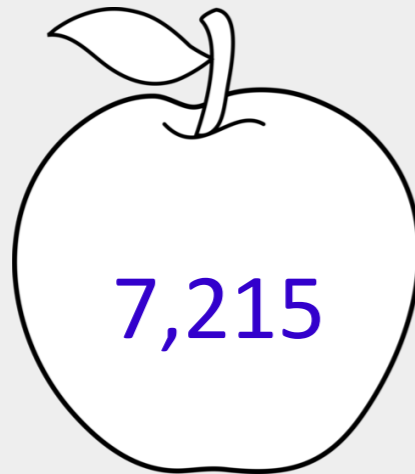
To find patterns, more details of each transaction (or lead, etc) needs to be available

Population Size

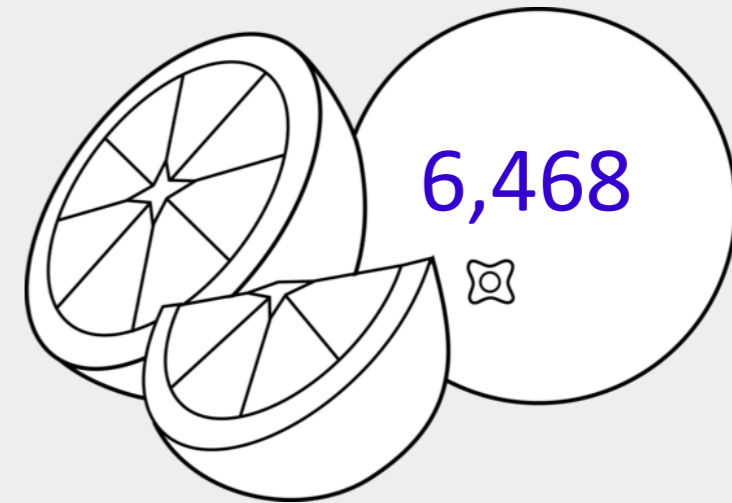
The data must be of a certain size, probably at least 50 conversions per day

Like for like comparison

Backend Data



Google Analytics Data

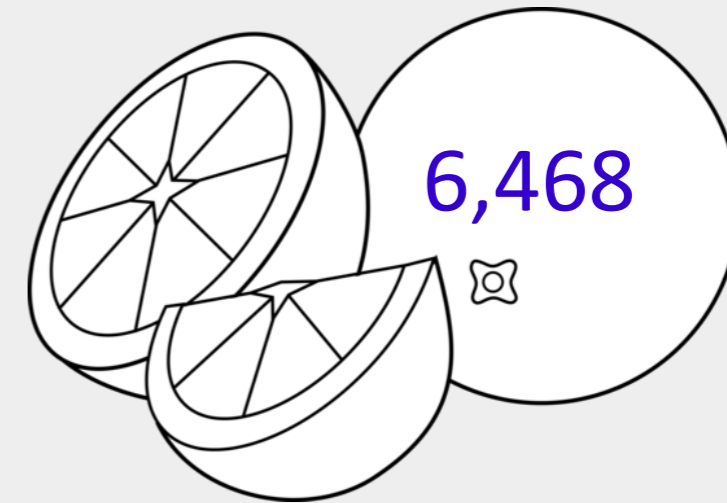
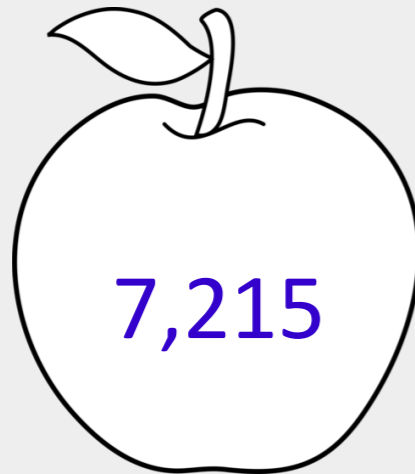


Like for like comparison

Backend Data

747 missing transactions or 10.4%

Google Analytics Data

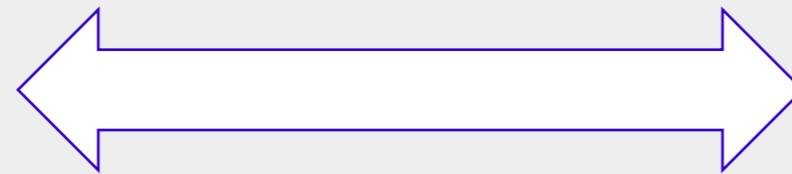
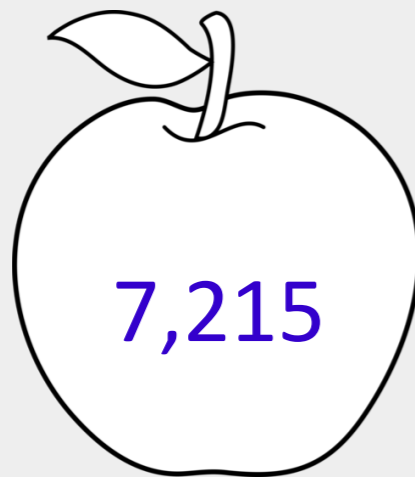


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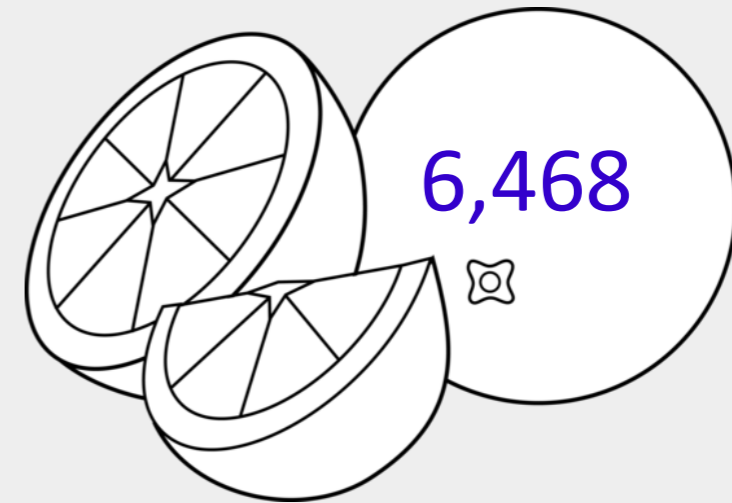
Backend Data

747 missing transactions or 10.4%

Google Analytics Data



- Date transaction recorded
- Time zone used



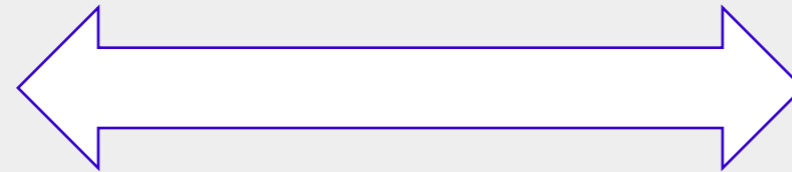
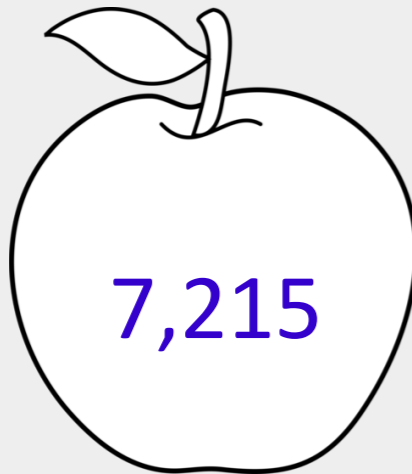
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Backend Data

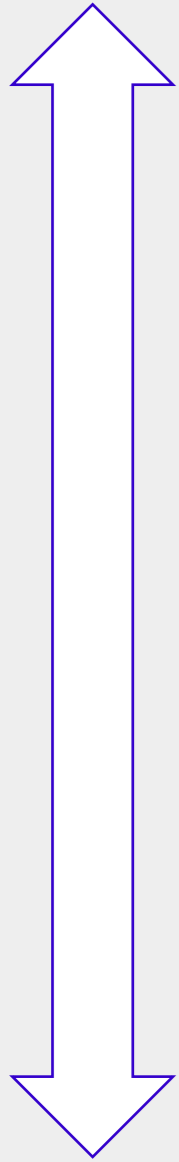
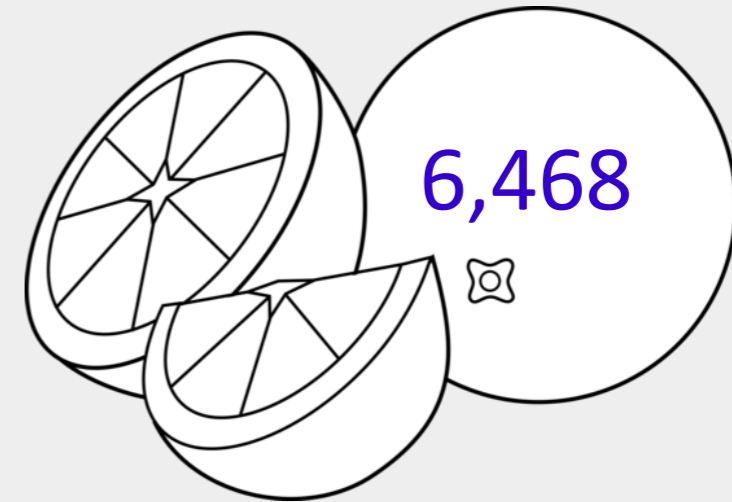
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Google Analytics Data

- Internal staff orders
- Call centre orders
- Store orders
- Duplicate transaction IDs



- Date transaction recorded
- Time zone used



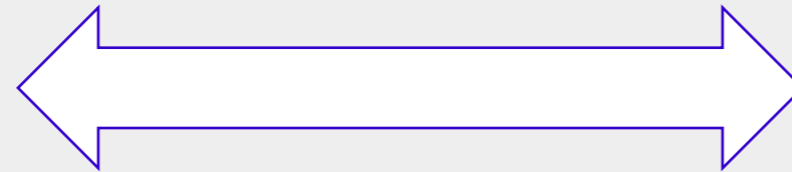
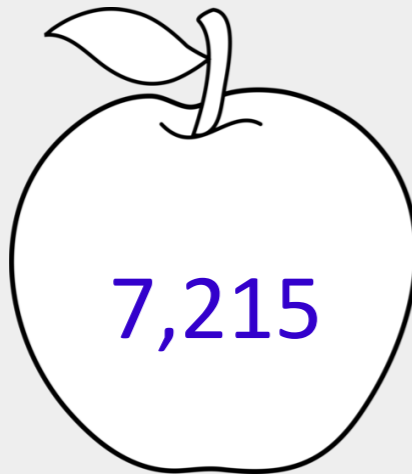
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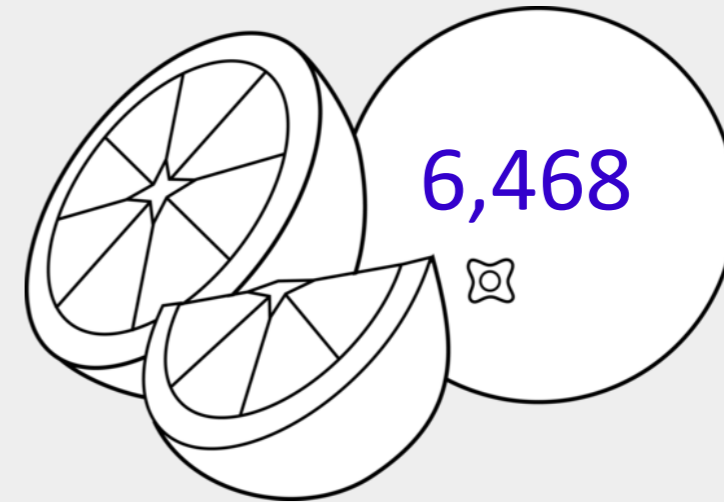
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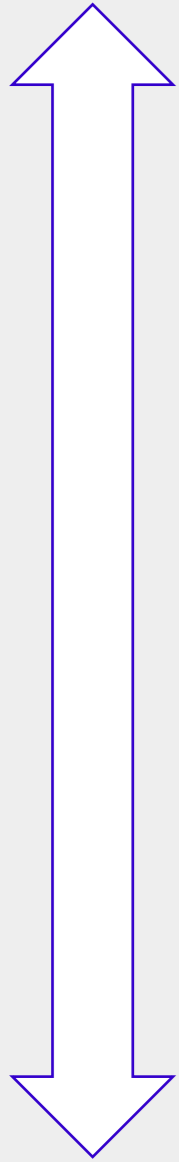
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- Call centre orders
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- Duplicate transaction IDs



- Date transaction recorded
- Time zone used



- Cancelled orders



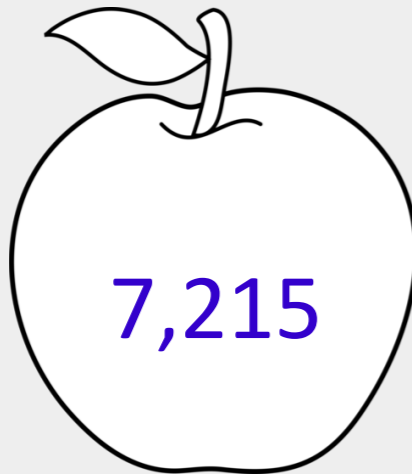
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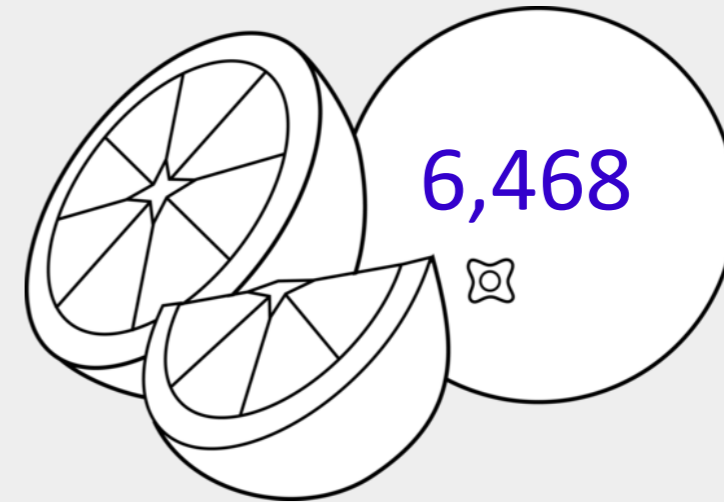
Google Analytics Data

- Internal staff orders
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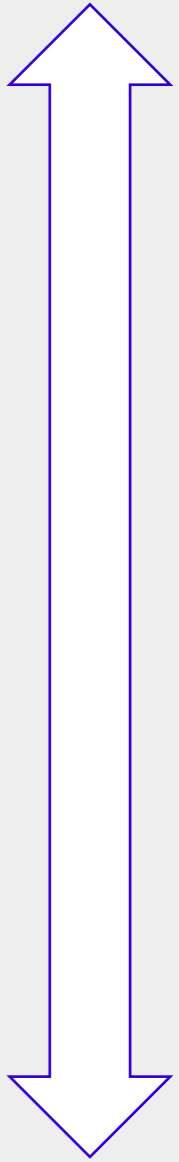
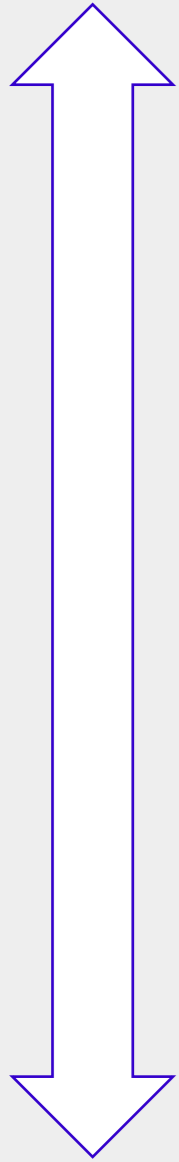
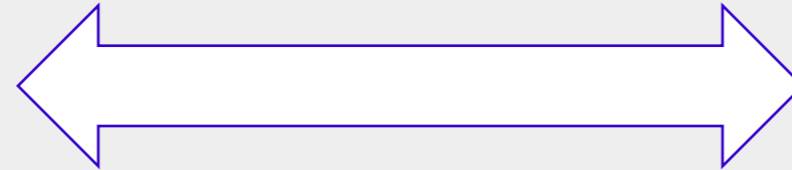


- Cancelled orders

- Duplicate transactions
- Test orders
- Internal orders



- Date transaction recorded
- Time zone used



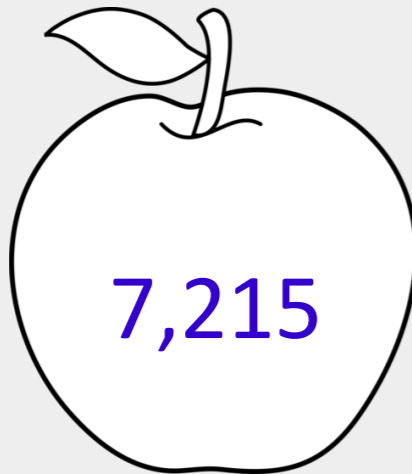
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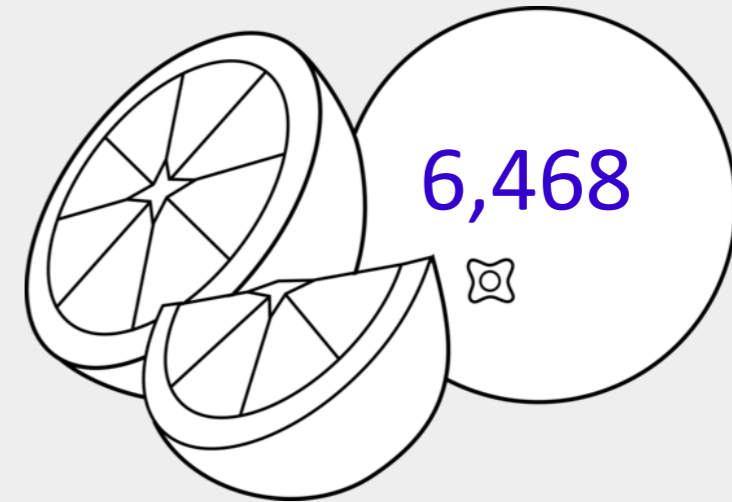
- Internal staff orders
- Call centre orders
- Store orders
- Duplicate transaction IDs



7,215

- Cancelled orders

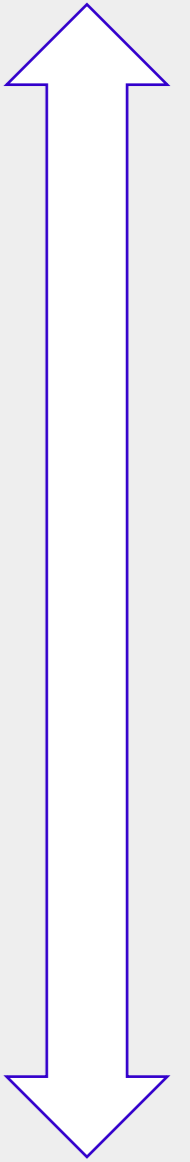
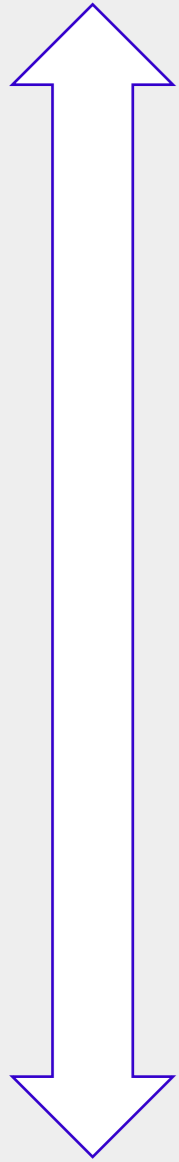
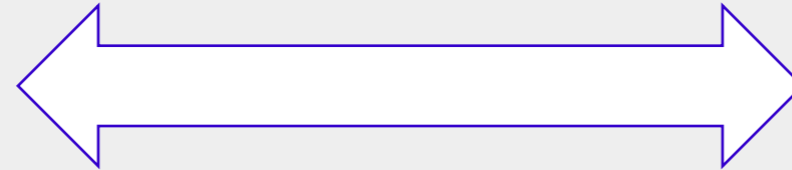
- Duplicate transactions
- Test orders
- Internal orders



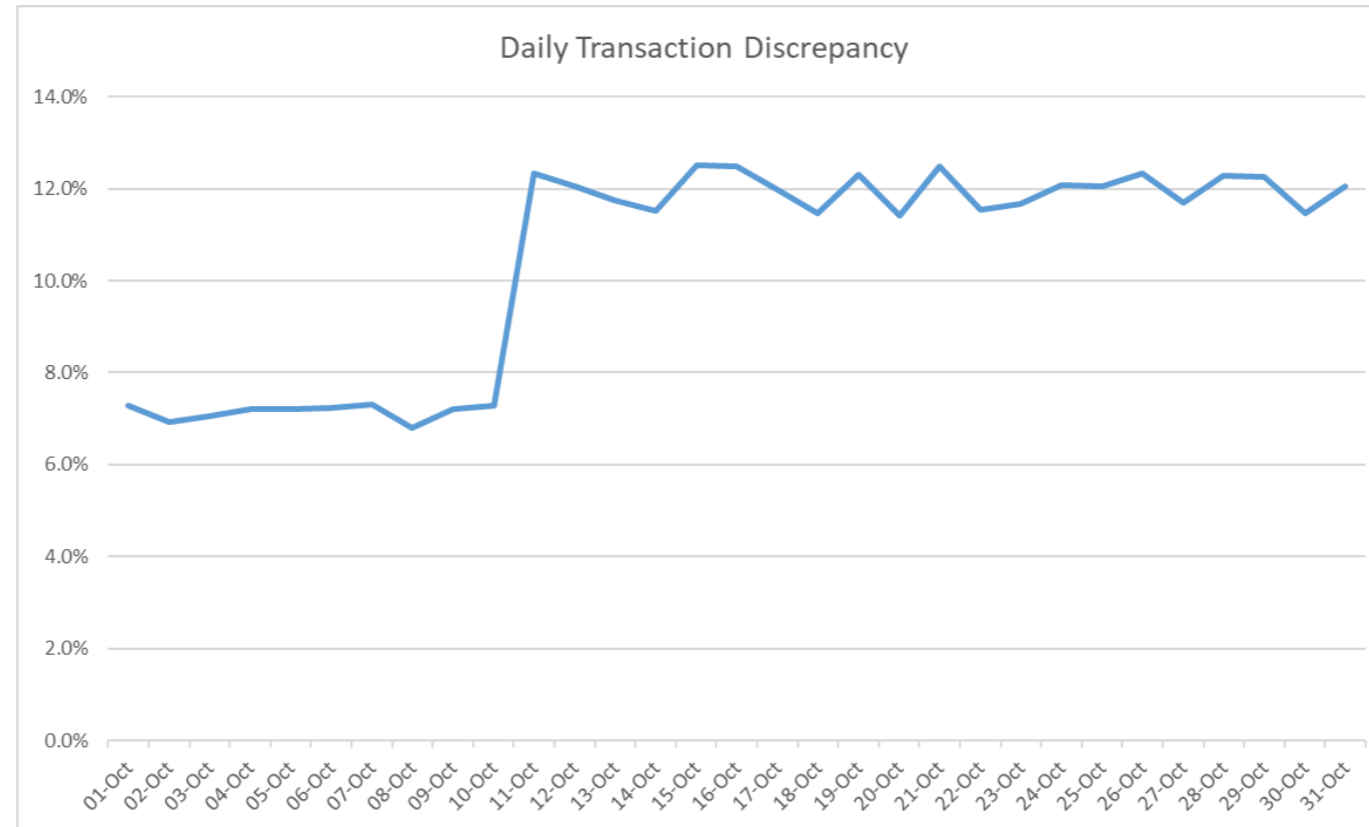
6,468

- Tracking issues

- Date transaction recorded
- Time zone used



Review the daily discrepancy



- It should be fairly consistent over time
- Patterns can indicate the cause of discrepancies

Compare IDs

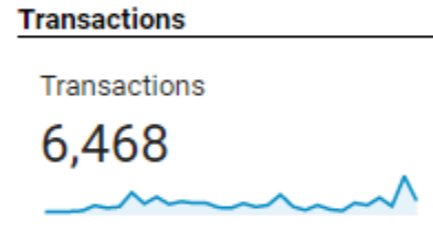
- Review set of GA transaction IDs against backend transaction IDs
- Also review set of backend transaction IDs against GA transaction IDs
- Discrepancy is 8.8%, hence further investigation needed
- Good to also identify GA transaction IDs not available in backend data

=IF(ISERROR(VLOOKUP(A2, 'GA Data'!A:A, 1, 0)), "Missing", "Captured")

Backend Data	GA Status		
DS6389	Captured	Captured	4,904
DS6388	Captured	Missing	474
DS6387	Captured		
DS6386	Captured		8.8%
DS6385	Captured		
DS6384	Captured		
DS6383	Captured		
DS6382	Captured		
DS6381	Captured		
DS6380	Captured		
DS6379	Captured		
DS6378	Captured		
DS6377	Captured		
DS6376	Captured		
DS6375	Captured		
DS6374	Captured		
DS6373	Captured		
DS6372	Captured		
DS6371	Missing		
DS6370	Captured		
DS6369	Captured		
DS6368	Captured		
DS6367	Captured		
DS6366	Captured		
DS6365	Captured		
DS6364	Captured		
DS6363	Captured		
DS6362	Captured		
DS6361	Captured		
DS6360	Captured		
DS6359	Missing		
DS6358	Captured		
DS6357	Missing		
DS6356	Captured		

GA Data	Backend Data		
DS1128	Captured	Captured	4,904
DS1124	Captured	Missing	26
DS1080	Captured		
DS6362	Captured		0.5%
DS5372	Captured		
SH1026	Missing		
DS4819	Captured		
DS5895	Captured		
DS5755	Captured		
DS1089	Captured		
DS2813	Captured		
DS1150	Captured		
DS1156	Captured		
DS1075	Captured		
DS1103	Captured		
DS1108	Captured		
DS1151	Captured		
DS2678	Captured		
DS1050	Captured		
DS1074	Captured		
DS1110	Captured		
SH1028	Missing		
SH1040	Missing		
DS1105	Captured		
DS1147	Captured		
DS1047	Captured		
DS1130	Captured		
DS3206	Captured		
DS2669	Captured		
DS4712	Captured		
DS2674	Captured		
DS5692	Captured		
DS1115	Captured		
DS3100	Captured		

Compare transactions to page views



Page ?	Page Views ?	Unique Page Views ? ↓	Entrances ?
	6,471 % of Total: 0.49% (1,315,065)	6,397 % of Total: 0.75% (857,019)	11 % of Total: 0.00% (251,362)
1. /checkout/order-confirmation	6,471 (100.00%)	6,397 (100.00%)	11 (100.00%)

- This is to ensure that a transaction is triggered on each page view of the confirmation page
- Can identify if alternative pages trigger transactions

Review discrepancy by key dimensions

- Need the dimension for all transactions
- Examples include payment method & delivery country
- Use a decent number of transactions
 - Can extend the date range as required
- The discrepancy by payment method should be fairly consistent
- Identifying a payment method with no recorded transaction IDs in GA makes life easier...

Payment Method	Captured	Missing	Discrepancy
Payment Method 1	61,763	3,146	5%
Payment Method 2	18,548	952	5%
Payment Method 3	3,482	164	4%
Payment Method 4	2,418	103	4%
Payment Method 5	1,737	80	4%
Payment Method 6	0	1,769	100%
Payment Method 7	1,688	78	4%
Payment Method 8	1,316	61	4%
Payment Method 9	1,278	58	4%
Payment Method 10	786	35	4%
Payment Method 11	779	31	4%
Payment Method 12	716	31	4%
Payment Method 13	721	25	3%
Payment Method 14	627	61	9%
Payment Method 15	577	42	7%
Payment Method 16	357	17	5%
Payment Method 17	340	7	2%
Payment Method 18	309	12	4%

Can check for patterns directly in GA

Browser ?	Commence Checkout (Goal 5 Completions) ? ↓	Checkout => Order	Transactions ?
	20,977 % of Total: 100.00% (20,977)	56.26% % of Total: 100.00% (56.26%)	11,845 % of Total: 100.00% (11,845)
1. Safari	11,268 (53.72%)	54.52% (96.90%)	6,160 (52.01%)
2. Chrome	5,321 (25.37%)	57.17%(101.61%)	3,057 (25.81%)
3. Internet Explorer	1,364 (6.50%)	64.00%(113.76%)	875 (7.39%)
4. Edge	1,126 (5.37%)	63.23%(112.39%)	716 (6.04%)
5. Firefox	1,078 (5.14%)	58.26%(103.54%)	631 (5.33%)

- Create goals or segments for the final stage prior to a conversion and for the conversion itself
- Calculate the completion rate of this final stage
- Review performance for key dimensions
 - E.g. Device category, browser (and browser version), country

Common causes of discrepancies

01

Payment methods

The visitor needs to end up on a confirmation page for all payment methods with the necessary information provided to trigger GA transaction code

02

Duplicate transactions

Only fire the GA transaction code if an actual transaction is being processed, not if an order confirmation is viewed

03

Internal conversions

Ensure all internal conversions are removed from both backend and analytics data before comparisons are made

04

Conversion actions not tracked

All methods that can be used to complete a conversion (particularly for leads) need to be tracked

05

Cancelled orders

Include cancelled orders in backend data when comparing with analytics data

06

Code not fired quickly enough

Ensure the analytics code on a confirmation page is fired as quickly as possible as it is a common exit page

Is the “normal” discrepancy increasing?

- 1 Intelligent Tracking Prevention (ITP)
- 2 General Data Protection Regulation (GDPR)
- 3 Ad blockers
- 4 “Cookies are bad”

Questions

Next time suggestions

1

Google Merchandise store page naming convention

2

Doing Digital Analytics My Way

3

Digital Analytics Maturity

Thank you for your time today



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